



Automobiles & Electric Vehicles

4 Weeks / 30 Hours

Offline/ Classroom

Internship & Training Program

Delhi-NCR | Lucknow | Bhubaneswar | Bhopal | Varanasi

Official Partner



EISYSTEMS TECHNOLOGIES

FF-113, Express Greens Plaza, Sector 1

Vaishali, Ghaziabad (Delhi NCR), Uttar Pradesh -201010

P: +91 9773976977 | E: info@eisystems.in | W: www.eisystems.in

Internship & Training Program

About EISystems

EISystems Technologies is a leading Indian technology identity with operations in 16 states and union territories of India. EISystems (We call it EISys) offers trainings in Machine Learning, Internet of things, Deep Learning, Computer Forensics, Automobiles, Robotics and Socialmedia related solutions for enterprises and student community. Our online edtech domain "Robokwik" have been in among top self learning products provider brands in India. We have trained about 70000 students and impacted around 2 lakhs students through our various outreach initiatives since our founding.

Our Clientele

Some of the colleges where we had already felt our presence are given below:-

Indian Institute of Science, Bangalore
Indian Institute of Technology, Bombay
Indian Institute of Technology, Delhi
Indian Institute of Technology, Madras
Indian Institute of Technology, Kanpur
Indian Institute of Technology, Roorkee
Indian Institute of Technology, Guwahati
Indian Institute of Technology (Banaras Hindu University), Varanasi
Indian Institute of Technology, Indore
Indian Institute of Technology, Bhubaneswar
Indian Institute of Technology, Jodhpur
Indian Institute of Technology, Hyderabad
National Institute of Technology, Tiruchirappalli
National Institute of Technology, Warangal
National Institute of Technology, Calicut
National Institute of Technology, Patna
National Institute of Technology, Jalandhar
National Institute of Technology, Jaipur
National Institute of Technology, Durgapur
National Institute of Technology, Surat
National Institute of Technology, Allahabad
Indian Institute of Information Technology, Allahabad
ABV- Indian Institute of Information Technology & Management, Gwalior
College of Engineering Guindy,
Anna University, Chennai
PSG College of Technology, Coimbatore
JNTUH College of Engineering, Hyderabad

and more than 100 other engineering colleges.

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Prerequisites

Participants from 1st year/ 2nd year / 3rd year / 4th year of ME/EEE/Automobiles/ related branches will get more benefited after joining this program.

What to bring during training program?

Here's the checklist

1. Fully charged laptop with Microsoft Windows configuration.
2. Laptop Charger/ Adapter
3. USB Mouse for designing purpose.

What we are expecting for COVID19 prevention?

During visit at our center we expect students / interns :-

1. To wear facemask during training session enough to cover mouth & nose.
2. To have a bottle of sanitizer all the time.
3. To come with a bottle of drinking water with enough water as it will not be provided at center.
4. To use Aarogya Setu app otherwise entry will not be allowed.
5. Not to use or atleast discourage using of washroom at center.
6. To follow social distancing norms and follow all government guidelines regarding COVID19 prevention.

Training Deliverables

Every participant will get all under mentioned deliverables

1. 30 hours classroom training by specialized trainer.
2. Certificate of Internship with project mentioning on it.
3. EISystems Access ID Card & Stylish Storage Folder
4. Notepad & Pen

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Course & Content

All of the sessions will be practical oriented, kindly look on the syllabus which we are going to cover during training days.

Session 1

Introduction to this program
About Automobile Mechanics
About Engines
Why EISystems Technologies only?
Expectations from this training program.
Possibilities in future.

Session 2

Basic Automobile & Designing
1. Introduction to Automobile Mechanics
2. Locomotive Vehicles
3. Chassis design
4. Brief terminology
 Multipoint Strut Bar
 Fenderbar
 Anti Roll Bar
 Monocoque
 Tubular Space
 Longeron RH,LH
5. Types of Chassis
 Ladder Frame Chassis
 Tubular Space Frame Chassis
 Monocoque Frame Chassis
 Ulsab Monocoque
 Backbone Frame Chassis
 AluminiumSpace Frame
 Carbon Fibre Monocoque

Session 3

Suspension Unit
Brief terminology
1. Weighttransfer sprung and unsprung
2. Jacking forces

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Camber & Caster Angle
Anti Dive & Anti Squat
Spring Rate
Travel Types of suspensions
Dependent Suspension
Independent Suspension
 Front Independent Suspensions
 McPherson Strut
Double Wishbone
Coil Spring typel
Coil Spring type2
Multi link type

Trailing Arm Suspension
Beam suspension
Rear suspension - Dependant Systems
Solid-axle, leaf-spring
Solid-axle, coil-spring
Beam Axle
Hydragas Suspension
Hydropneumatic Suspension
Progressively wound springs
Torsion bars

Session 4

Braking Unit
Disc brakes
1. Self adjusting nature
2. Disc damage modes
Anti-lock Braking System
Four-channel, Four-sensor ABS
Three-channel, Three-sensor ABS
One-channel, One-sensor ABS

Brake Actuators
Cable-Operated
Solid Bar Connection
Single-Circuit Hydraulic
Dual-Circuit Hydraulic
Brake-by-Wire
Power Brakes and Master Cylinders
Brake fluids

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Session 5

Transmission
Gear ratio
Different types of gear
Clutch & its components
Reverse & its working
Automatic transmission
Planetary gear sets
DSG / DCT Gearboxes
Torque Converters

Session 6

Differential & Traction
Open Differentials
Limited-slip Differentials
Locking Differentials
2WD, 4WD, AWD
Tyres and Traction Control
Tyre size notations
Tyre types for passenger cars
Tyre constructions
Cross-ply construction
Radial Construction
Tyre Tread
Traction & its control

Session 7 & 8

IC Engines Session
Types
Compression ignition Spark ignition
Layout
Engine balancing
Spark Plug
Carburetor
Fuel Injector
Valves & Valve Timing
Valve trains
Engine Cooling
Turbochargers & Superchargers

Session 9

Virtual Engine Dis-assembly Session

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Session 10

Technology Session

Latest Technologies

PGMF1

DTS.fi MPFI CRDI RTR

I-Vtec & Tem

Airbags & Steering System

Updation & Duration of Course

The course (given above) is a proposed structure and we are currently working to update it considering industry requirements, we may add / delete / modify sessions in it without any prior notification. The internship program is divided into two parts i.e. training period (2 weeks) and project period(2 weeks) however total duration of program will remain 4 weeks only.

Disclaimer

A session doesn't necessarily depict the day count or the day on which it is going to be covered, we may cover more than or lesser than one session in a day and even alter/amend the schedule by rearranging of session(s) by removing/adding anything from/to overall course, the course structure may differ center wise, Also this is to notify that Eisystems Technologies is nowhere specifying that center in Varanasi will be IIT (BHU) Varanasi campus, our center in Varanasi is different. Fees once paid will not be refunded, Please check our refund policy given on website before proceeding for payment. It is important to note that IIT (BHU) Varanasi or any of its body is not charging anything for this training program and whatever amount which you will be paying will either go to Eisystems Technologies or its associates or both.

COVID-19 Policy

No amount will be refunded in case of non conduction of program due to government guidelines for COVID-19 prevention and instead remaining / all sessions will be conducted online through mentor led training however we will also give flexibility to students/ attendee to continue the remaining session when things normalize at other center.

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